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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/512,071	04/22/2005	Volkmar Offermann	261010US0PCT	7464
22850	7590	03/09/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			CHEN, VIVIAN	
			ART UNIT	PAPER NUMBER

1773

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/512,071

Applicant(s)

OFFERMANN ET AL.

Examiner

Vivian Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-15, 17-20 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 16 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-11 have been cancelled by Applicant.

Claim Rejections - 35 USC § 112

2. The rejections under 35 U.S.C. 112, second paragraph, in the previous Office Action have been withdrawn in view of Applicant's Amendments filed 12/22/2005.

Claim Rejections - 35 USC § 103

3. Claims 12-15, 17-20, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over EDWARDS (US 3,630,809).

EDWARDS discloses a composite panel comprising a glass/adhesive/film/adhesive/glass structure, wherein the adhesive is polyvinyl butyral or ethylene vinyl acetate, wherein the film is a PET film coated with an infrared-reflecting dielectric stack; and wherein one of the adhesive layers is colored. (EDWARDS, line 54, col. 4 to line 43, col. 5; line 45, col. 6 to line 15, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate colorants in the adhesive and optionally the film layer of EDWARDS in order to obtain specific light filtering and aesthetic effects and/or to correct the coloration of the overall laminate (claims 13, 23-24). Since adhesive layers are typically softer and/or has lesser mechanical properties than the structural layers of a laminate, the Examiner has reason to believe that the adhesive layers would deform to conform to the planar surface of the intermediate layer during the bonding process.

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4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over EDWARDS (US 3,630,809) as applied to claim 1 above, and further in view of CASS (US 4,591,525).

CASS discloses that it is well known in the art to use polymethyl methacrylate adhesives in light transmitting safety laminates. (line 55-68, col. 3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known optical adhesives such as PMMA depending on the material costs and the type of materials being bonded together.

5. Claims 12-15, 17-20, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over MORAN ET AL (US 2001/0046595).

MORAN ET AL discloses a composite panel comprising a glass/adhesive/film/adhesive/glass structure, wherein the adhesive is polyvinyl butyral typically of the recited thickness, wherein the film is a PET film coated with a metal oxide reflecting layer; and wherein at least one of the adhesive layers is colored. (paragraphs 20, 24, 26, 28)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate colorants in the adhesive and optionally the film layer of MORAN ET AL in order to obtain specific light filtering and aesthetic effects and/or to correct the coloration of the overall laminate (claims 13, 23-24) Since adhesive layers are typically softer and/or has lesser mechanical properties than the structural layers of a laminate, the Examiner has reason to believe that the adhesive layers would deform to conform to the planar surface of the intermediate layer during the bonding process.

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6. The rejections under 35 U.S.C. 103(a) based on VON ALPEN (US 5,496,643) have been withdrawn in view of Applicant's amendments filed 12/23/2005.

Response to Arguments

7. Applicant's arguments filed 12/23/2005 have been fully considered but they are not persuasive.

(A) Applicant argues that EDWARDS and MORAN fail to disclose the claimed invention because the claimed invention requires an interlayer consisting of a colored adhesive layer/intermediate layer such as PET/uncolored adhesive film. However, while the "consisting of" language limits the interlayer to three components, the language does not restrict the composition of individual components and therefore does not preclude the use of an intermediate layer made up of multiple parts; therefore, the coated PET film of EDWARDS and MORAN meets the limitation of "one intermediate layer" component as recited in the claims.

(B) In response to applicant's argument that the references do not explicitly disclose the recited flattening, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Since adhesive layers are typically softer and/or has lesser mechanical properties than the structural layers of multilayer structures (e.g., support layers, etc), the Examiner has reason to believe that the adhesive layers in MORAN and EDWARD references

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would deform to conform to the planar surface of the typically stiffer intermediate layer during the bonding process.

(C) Applicant argues that MORAN fails to disclose the recited intermediate layer thickness. However, the reference clearly discloses that the PET layer of the intermediate layer can have a thickness as low as 25 microns (paragraph 0024), which reads on the claimed range of 10-100 microns. The expression of a preferred range does not obviate the fact that the reference clearly teaches the use of films having thickness values which read upon the claimed thickness range.

(D) Applicant argues that MORAN fails to disclose a colored PVB layer in combination with a uncolored PVB layer. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., PVB adhesive layers) are not recited in the majority of the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With respect to claim 19, the reference clearly discloses that colorants can be optionally incorporated into the adhesive layers. The inclusion or exclusion of a conventional additive with well established effects (e.g., pigments or dyes) in various layers of a multilayer film structure is a design choice well within the general skill of a worker in the art depending on the specific optical (e.g., transmissive or filtering properties), visual, decorative, and/or aesthetic characteristics desired for a given end use. Applicant has not provided any probative evidence to the contrary, nor has Applicant provided evidence of criticality or unexpected results from the use of only one colored layer.

Allowable Subject Matter

1. Claims 16, 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose a composite pane comprising two rigid panes and an intervening immediate layer consisting essentially of one colored adhesive layer, an intermediate layer having a thickness of 10-100 microns, and an uncolored adhesive layer, wherein: (1) the intermediate layer is rigid pane of glass or plastic (claim 16); (2) at least one adhesive layer is composed of EVA (claim 21).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 3, 2006



Vivian Chen
Primary Examiner
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